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### REMARKS

Reconsideration is requested in view of the above amendments and the following remarks. Claim 1 has been revised. Support for the revisions can be found at, e.g., Fig. 1C of the present application, among other places. Claims 1-12 remain pending in the application.

Claims 1-12 are rejected under 35 USC § 103(a) as being obvious over Kunii et al. (US 4,181,120) in view of Drinkwater et al. (US2004/0254470). Applicants respectfully traverse this rejection.

Claim 1 requires an ultrasonic device that is accommodated in a space that is surrounded by a frame and a window and that is filled with ultrasound propagation medium. Claim 1 also requires a window that comprises a metal portion including a part that is embedded in an inside of the resin portion and another part that is not covered with the resin portion at a position opposed to a peripheral portion of the frame. Claim 1 further requires coupling of the window and the frame being implemented by directly coupling the part of the metal portion exposed to the outside of the resin portion with the frame.

As shown in Fig. 1A-C, in an illustrative embodiment, an ultrasonic device 1 is accommodated in a space that is surrounded by a frame 4 and a window 5, where the space is filled with ultrasound propagation medium. The window 5 comprises a metal portion 5a including a part that is embedded in an inside of a resin portion 5b and another part that is not covered with the resin portion 5b at a position opposed to a peripheral portion of the frame 4. The coupling of the window 5 and the frame 4 is implemented by directly coupling the part of the metal portion 5a exposed to the outside of the resin portion 5b with the frame 4. This arrangement helps couple more stably the frame and the window and thus prevents leakage of an acoustic propagation medium and suppresses the intrusion of bubbles. As a result, reliability of the ultrasonic probe has been effectively increased (see, e.g., paragraph [0009] of the specification, among other places).

Kunii et al. fail to teach or suggest an ultrasonic device that is accommodated in a space that is surrounded by a frame and a window and that is filled with ultrasound propagation medium, as required by claim 1. Drinkwater et al. do not remedy the

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deficiencies of Kunii et al. Instead, Drinkwater et al. merely discuss a probe assembly 2 that includes an axle 12 upon which an array of ultrasonic transducers 14 is mounted in such a configuration as to point towards a surface under investigation, where first and second end pieces 16 and 18 are rotatably mounted on the axle 12 by way of bearings 20 (see Drinkwater et al., Fig. 2 and paragraph [0037]). In fact, the axle 12 in Drinkwater et al. is completely distinct from the frame of the invention of claim 1. As clearly shown in Fig. 2 of Drinkwater et al., the ultrasonic transducer 14 is mounted on the axle 12, rather than being accommodated in a space that is surrounded by a frame, as required by claim 1.

Kunii et al. also fail to teach or suggest a window that comprises a metal portion including a part that is embedded in an inside of the resin portion and another part that is not covered with the resin portion at a position opposed to a peripheral portion of the frame, as required by claim 1. On the other hand, Kunii et al. discuss a protection cap 20 that comprises an internal frame member 21 of a rigid reinforcing material such as a metal plate covered by an elastic film 22, where the film 22 appears to be made of resin material (see Kunii et al., col. 3, lines 27-36, and Fig. 2). As clearly shown in Fig. 2a of Kunii et al., the internal frame member 21 is completely covered by the elastic film 22. The present record provides no teachings or suggestions of the window including the metal portion in the manner as required by claim 1, much less any reason to expect that the advantages enjoyed by claim 1, for example, helping couple more stably the frame and the window and preventing leakage of an acoustic propagation medium and suppressing the intrusion of bubbles, could be achieved. Drinkwater et al. do not remedy the deficiencies of Kunii et al.

Nor do Kunii et al. teach or suggest coupling of the window and the frame being implemented by directly coupling the part of the metal portion exposed to the outside of the resin portion with the frame, as required by claim 1. Instead, as clearly shown in Fig. 3a of Kunii et al., the coupling of the protection cap 20 and the vessel body 31 is made by coupling the elastic film 22 with the vessel body 31, rather than directly coupling the internal frame member 21 with the vessel body 31. In fact, as discussed above, the internal frame member 21 in Kunii et al. is completely covered by the elastic film and does not have a portion that is exposed to the outside of a resin portion. This is

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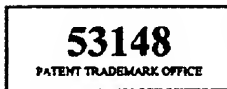
completely distinct from the invention of claim 1, which requires coupling of the window and the frame being implemented by directly coupling the part of the metal portion exposed to the outside of the resin portion with the frame. Drinkwater et al. do not remedy the deficiencies of Kunii et al.

For at least these reasons, claim 1 is patentable over Kunii et al. in view of Drinkwater et al. Claims 2-11 depend from claim 1 and are patentable along with claim 1 and need not be separately distinguished at this time. Applicants are not conceding the relevance of the rejection to the remaining features of the rejected claims.

In view of the above, favorable reconsideration in the form of a notice of allowance is respectfully requested. Any questions regarding this communication can be directed to the undersigned attorney, Douglas P. Mueller, Reg. No. 30,300, at (612) 455-3804.

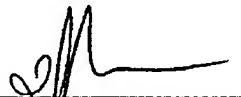
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